

MERCER

Investment Consulting

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Total Fund Review – First Quarter Board Meeting Arizona State Retirement System

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Economic Environment

Economy Is Behind Expectations

Mixed data offers no resolution about direction

- The economy expanded during the quarter at the slowest pace in four years, due primarily to weakness in the housing sector and rising energy prices. The initial government estimate of first-quarter GDP growth was 1.3%.
- Job growth was much stronger than expected, with employers adding about 440,000 new jobs during the quarter. The unemployment rate edged down to 4.4%, the lowest since October.
- Consumer confidence fell in March amid concerns over higher gasoline prices and stock market volatility. Consumer spending remained strong despite the decline in home values and rising number of mortgage defaults.

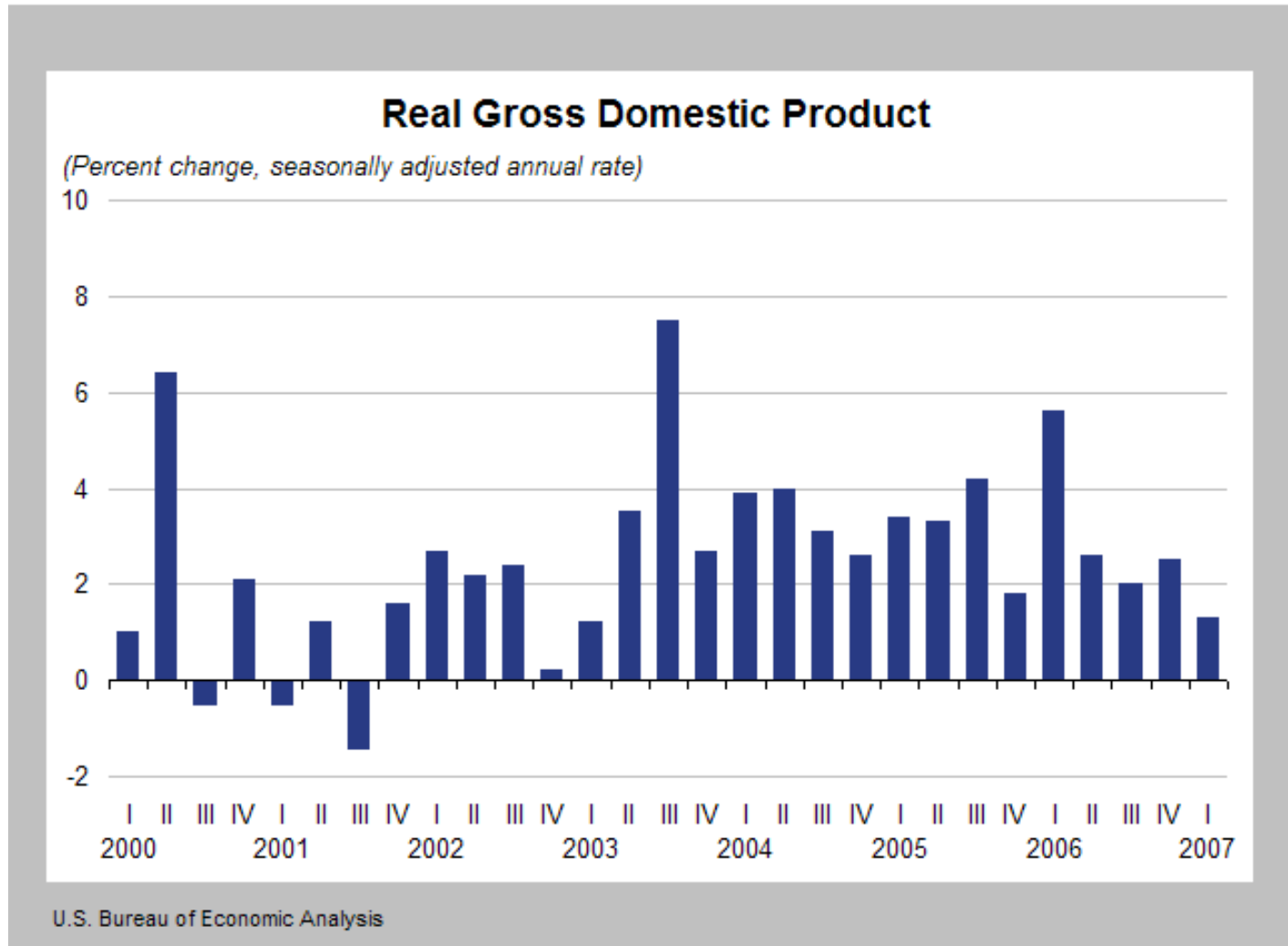
Economy Is Behind Expectations

Mixed data offers no resolution about direction

- Housing activity remained weak, with new home construction starts down 23% from a year ago and building permits off 26%. The average 30-year fixed-rate mortgage hit a high for the quarter of 6.39% in January, but fell to 6.18% at the end of March.

Weakest GDP in Four Years

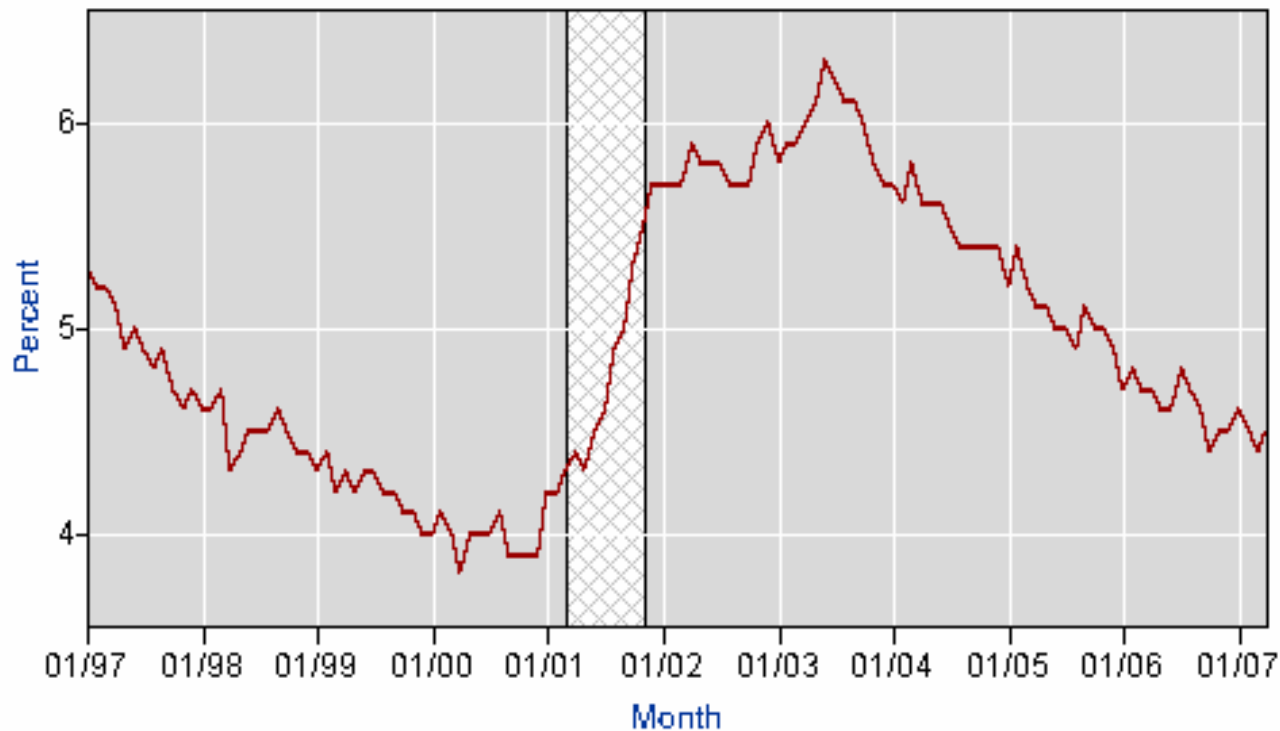
Stabilization of moderate growth rate



Unemployment Rate Is Very Solid

Job growth much stronger than expected

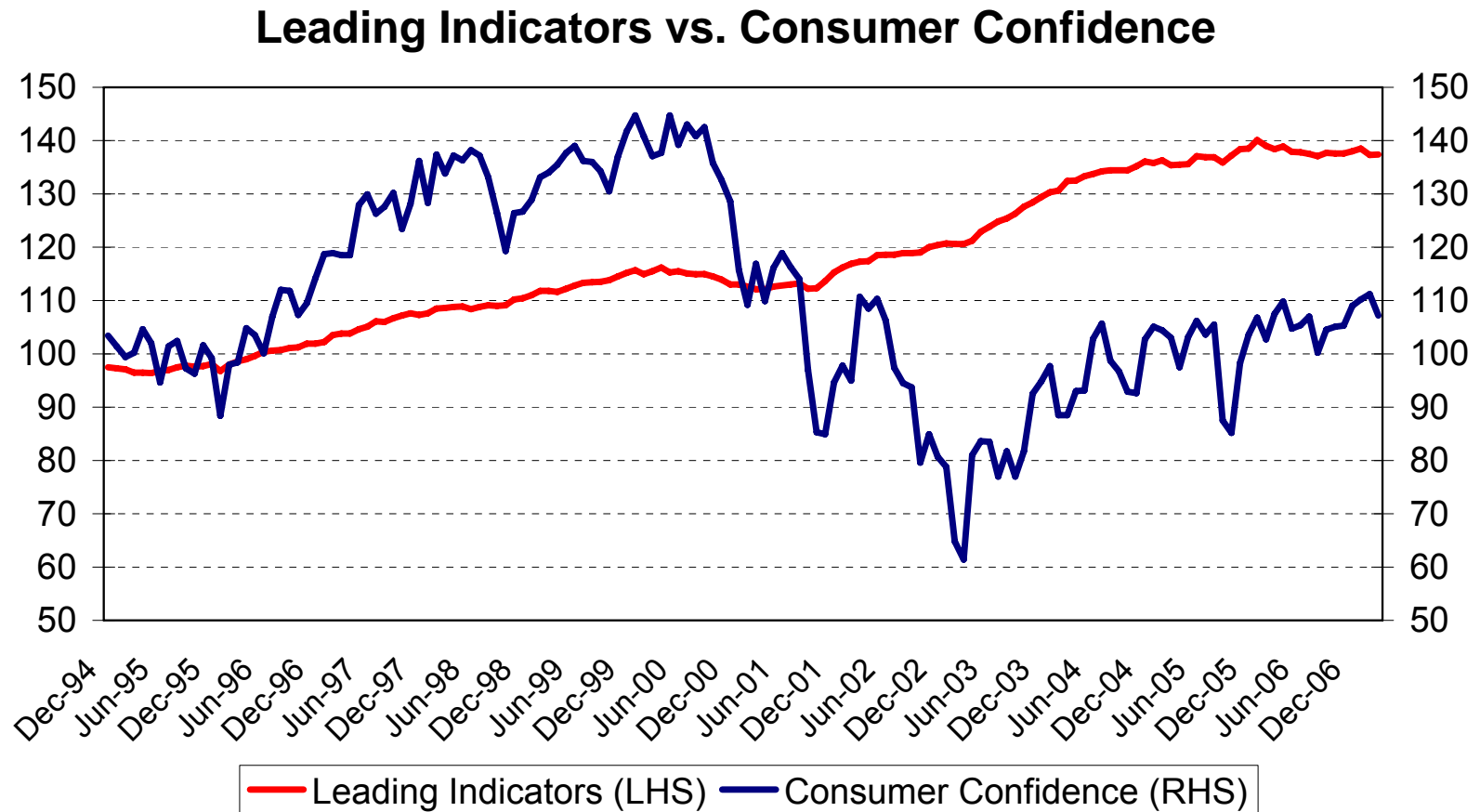
Unemployment rate (seasonally adjusted)



Note: Cross-hatched area represents recession.

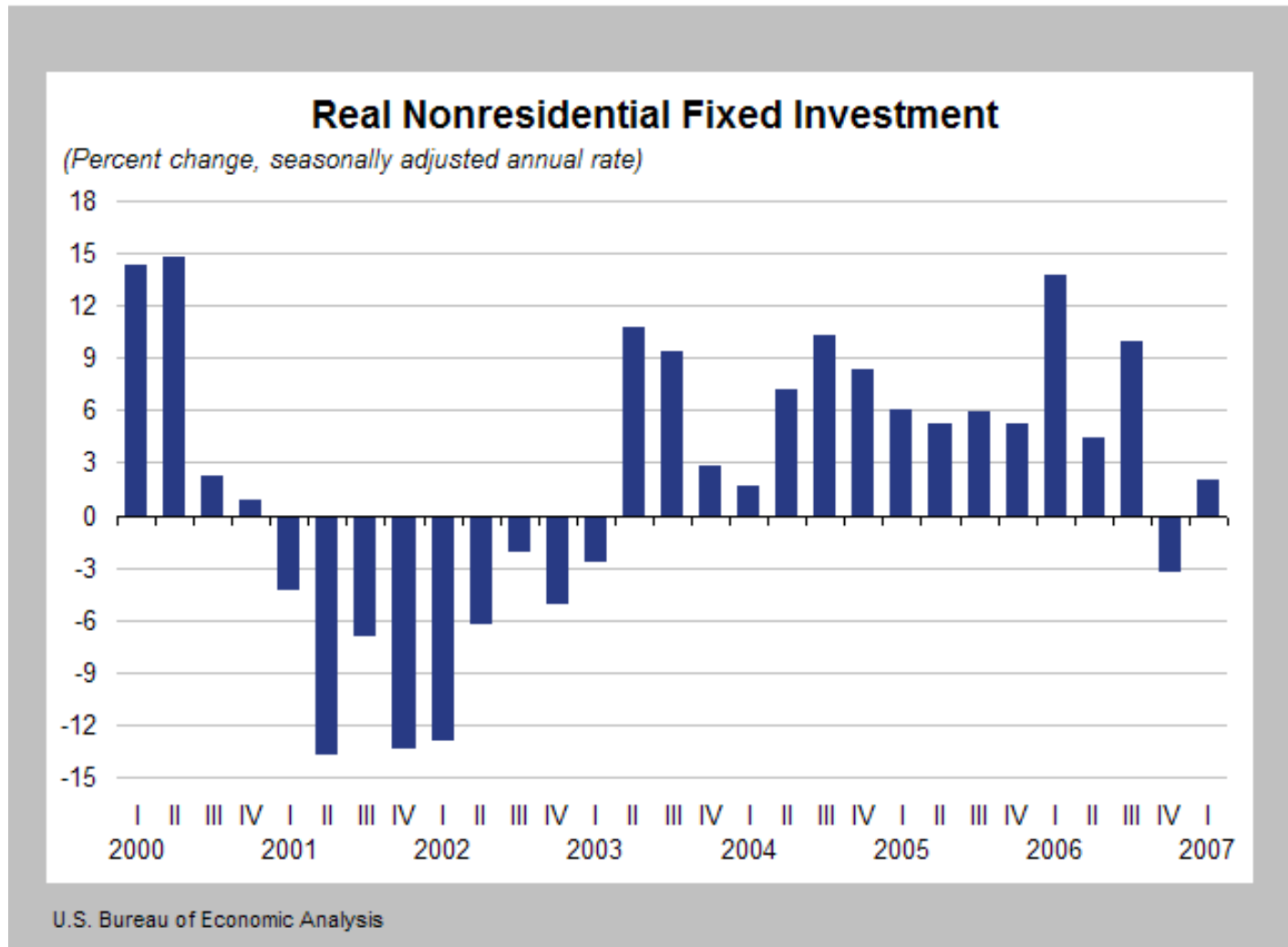
Fundamentals Still in Place

Consumer confidence and leading indicators not decelerating

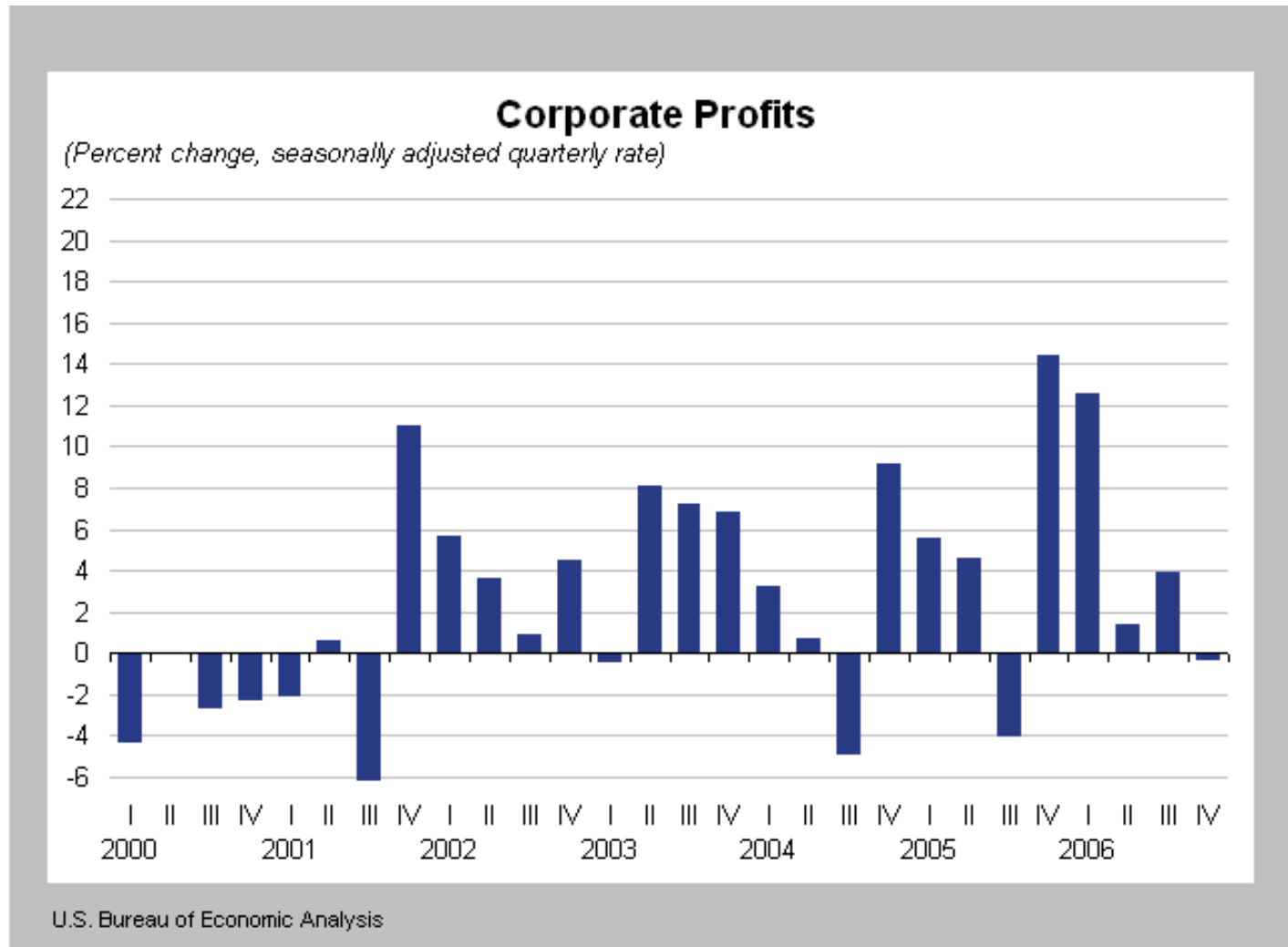


Corporate Capital Spending Rebounds

Business investment is still weak

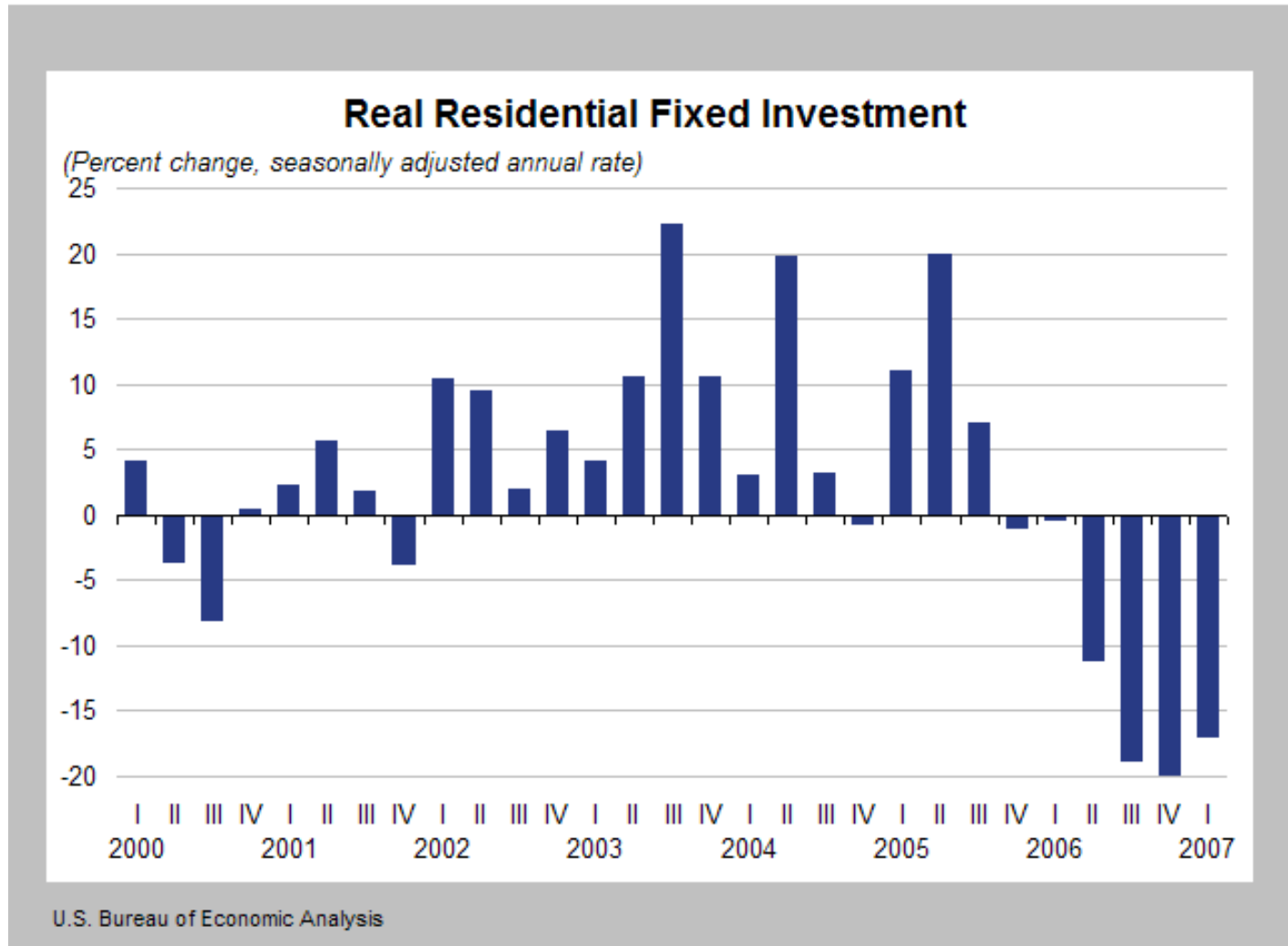


Corporate Profits Are Negative



Housing and Autos Sectors Are in Turmoil

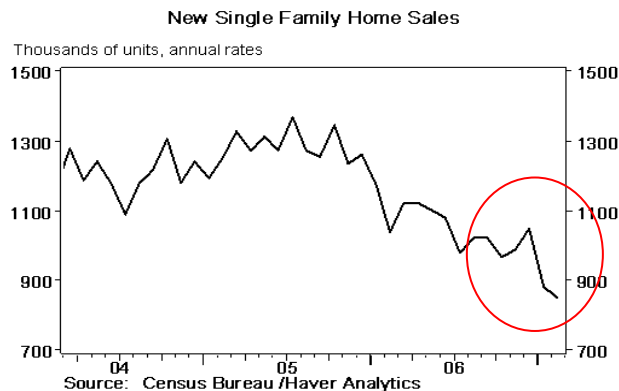
Activity remained weak



Mortgages Are Problematic

Tightening lending standards may prolong the slowdown

- Hybrid mortgages have facilitated easy credit with attractive structures to allow and entice broad-based borrowing
- Approximately 20 sub prime mortgage lenders took center stage as they closed up shop
- Time of easy credit for overextended or sub-prime borrower is ending with tighter lending/credit standards
- Impact on housing prices may be broad based as financing gets more difficult with tighter standards and higher interest rates

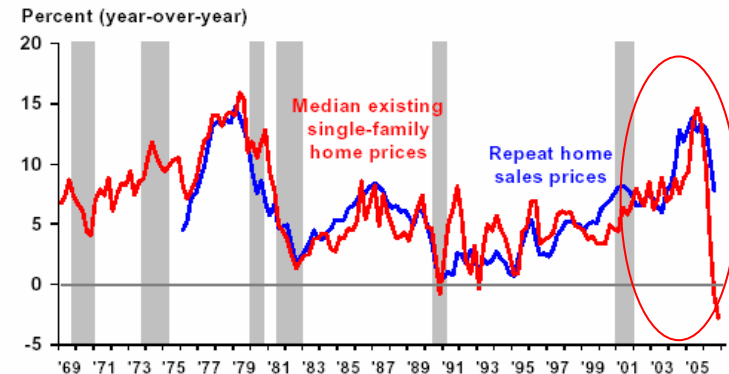


Last updated 3/26

Source: Boston Federal Reserve



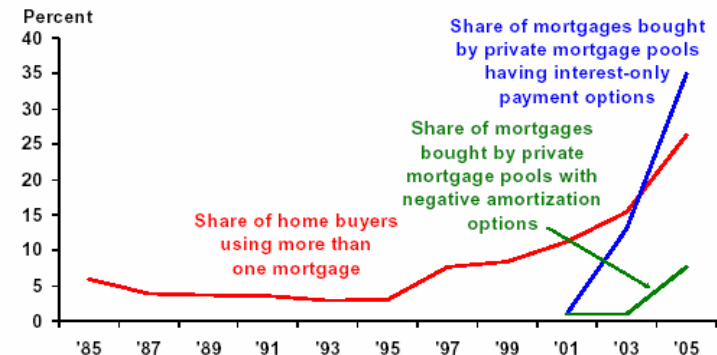
Home-Price Appreciation Slowing Sharply



Source: Dallas Federal Reserve



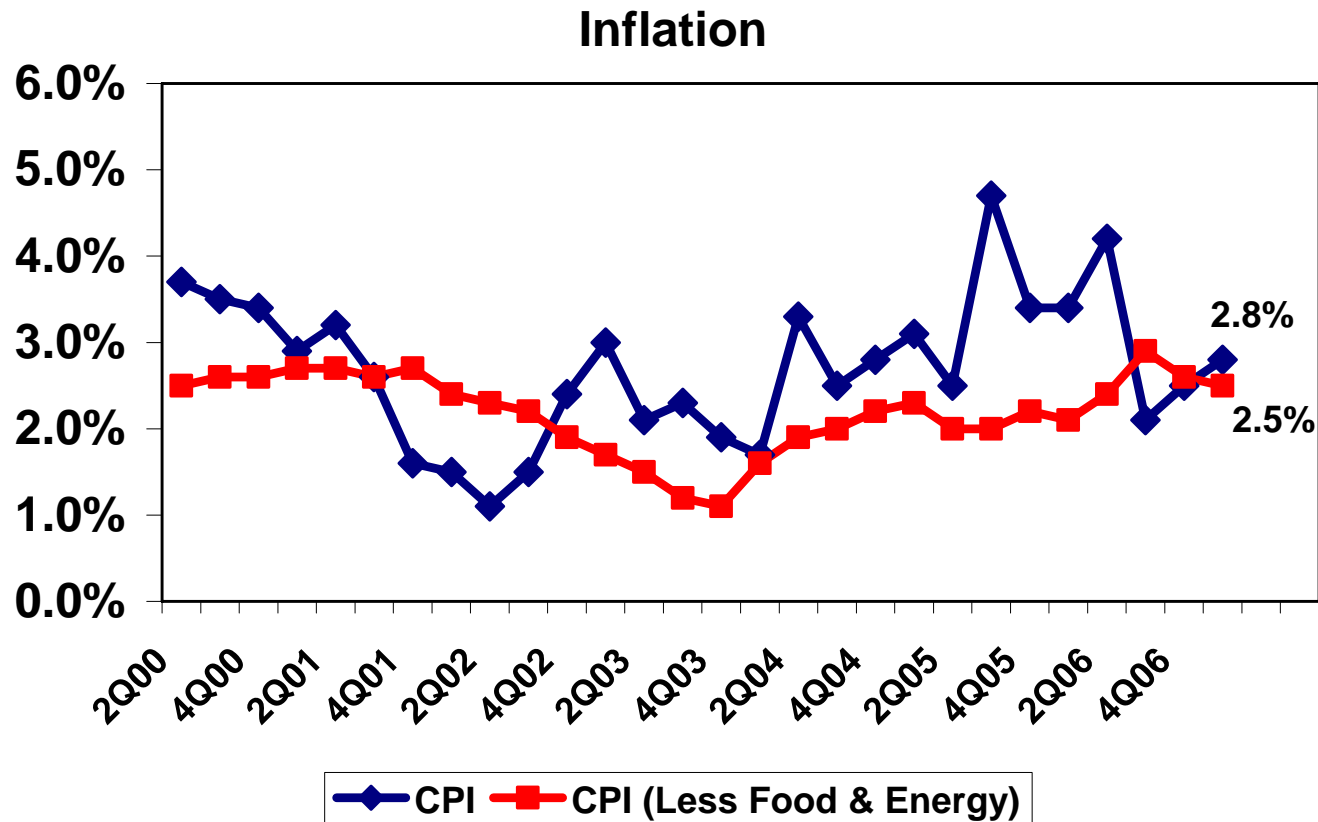
Rising Use of Multiple, Interest-Only and Negative Amortization Mortgages in the U.S.



Source: Dallas Federal Reserve

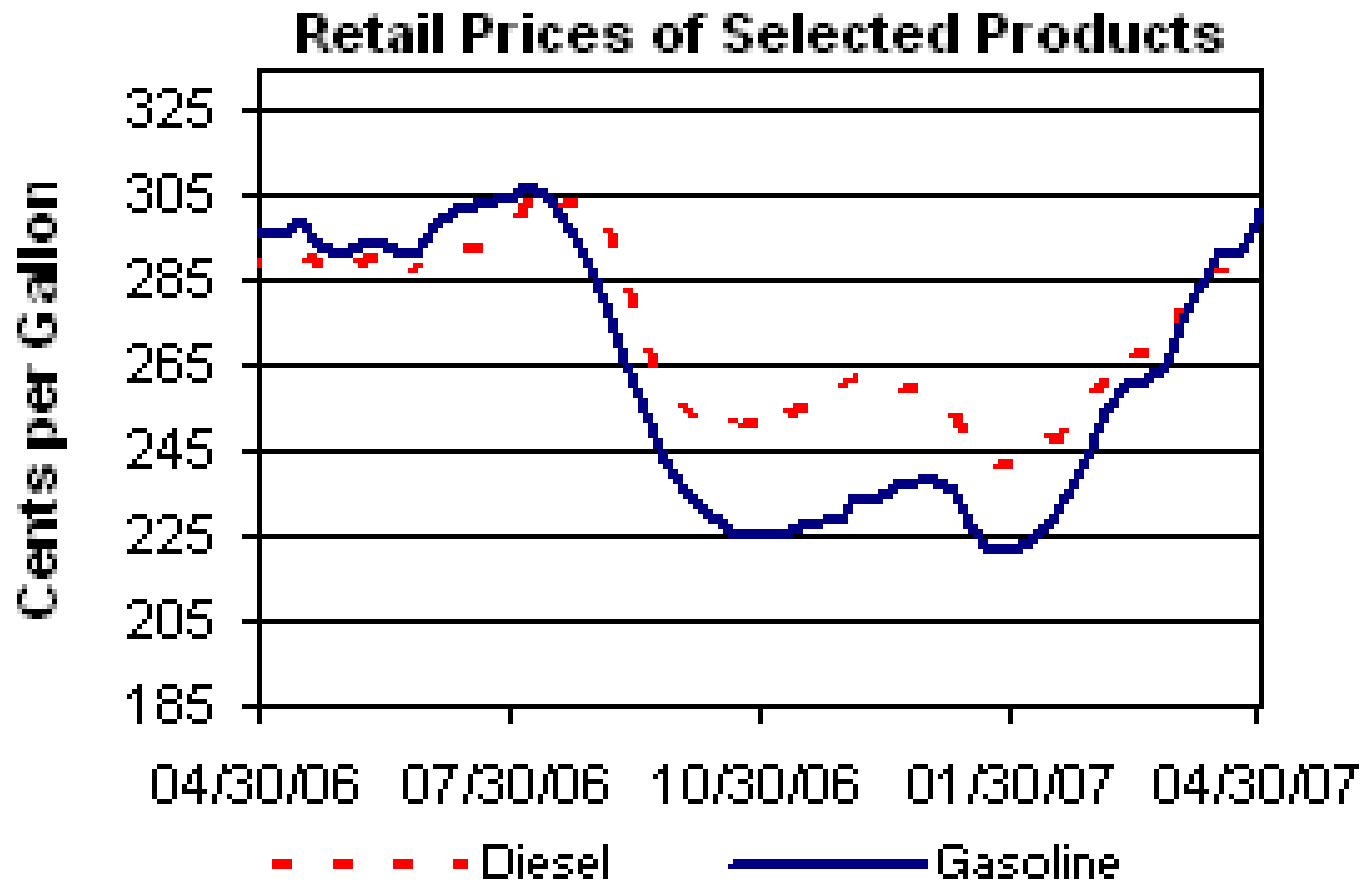
Rising Consumer Prices

Core inflation remained low



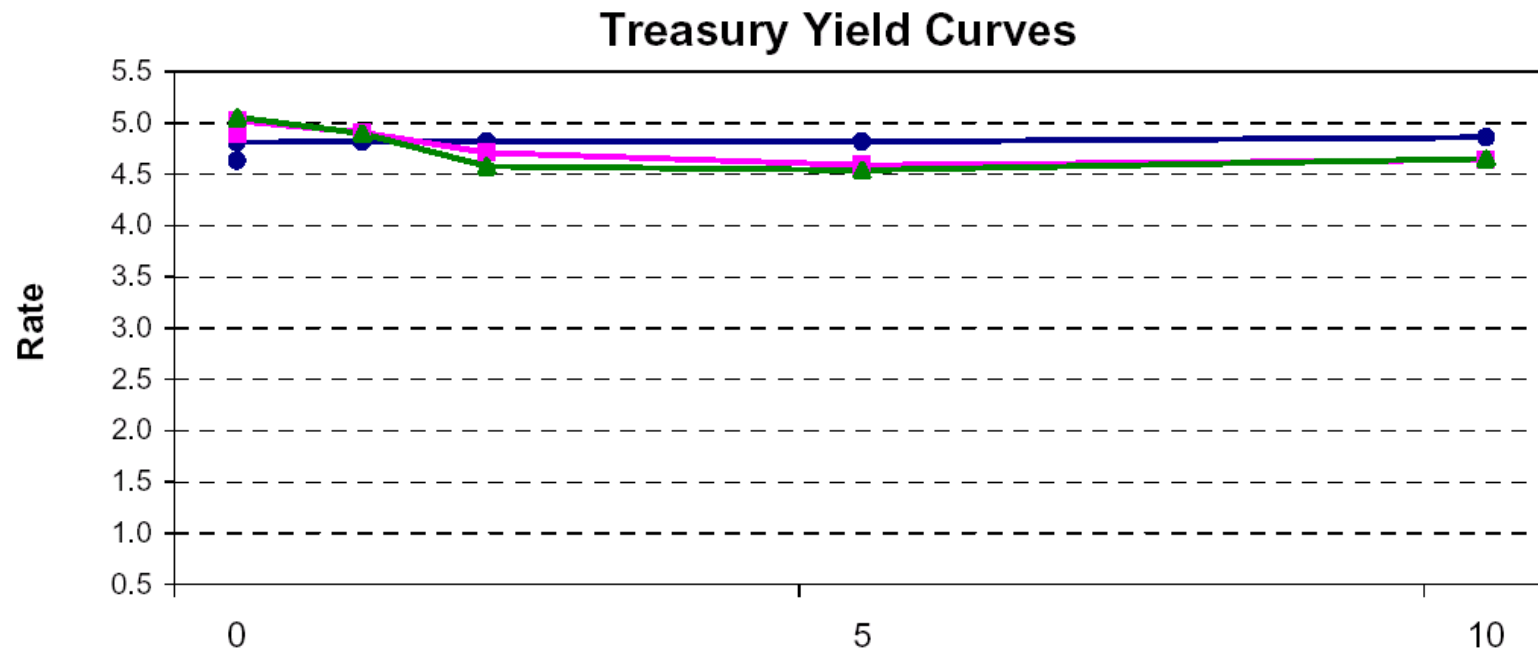
Source: U.S. Department of Labor Bureau of Labor Statistics.
All Urban Consumers. Year-over-year. Seasonally Adjusted.

Higher Energy Prices Burden for consumers



Yield Curve Shifted Downwards

Fed left interest rates unchanged at 5.25%



Years	0.25	0.5	1	2	5	10
Mar-06	4.63	4.81	4.82	4.82	4.82	4.86
Sep-06	4.89	5.02	4.91	4.71	4.59	4.64
Mar-07	5.04	5.06	4.9	4.58	4.54	4.65



Securities Markets

First Quarter 2007 Highlights

- After a sell-off in late February, March recovery produced gains
- International equities continued to outperform US stocks
- Emerging markets cool off; returns mixed across regions
- Bond markets posted modest gains
- Equity REITs posted solid gains; mortgage REITs fell sharply
- Hedge funds posted modest gains; big hedge funds got bigger
- Private equity buyouts – a large increase in size and number fuels enthusiasm for M&A activity

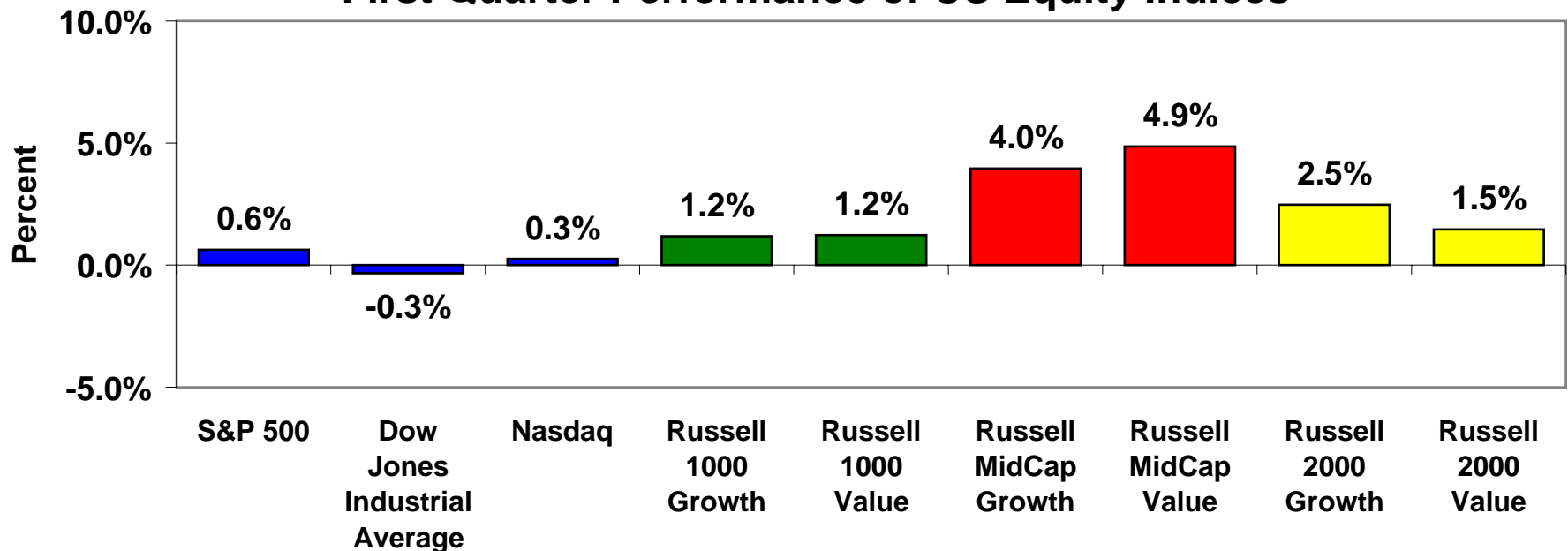
Mixed Results for US Equity

Mid-cap value and growth stocks fared the best

Capital Markets: US Equity Market

- Despite increased volatility, US markets generally produced modest gains
- Global markets declined dramatically in late February, but rebounded late in March; US equities producing their best weekly gain since 2003
- Mid- and small cap stocks outperformed despite increased volatility and a slowing economy

First Quarter Performance of US Equity Indices



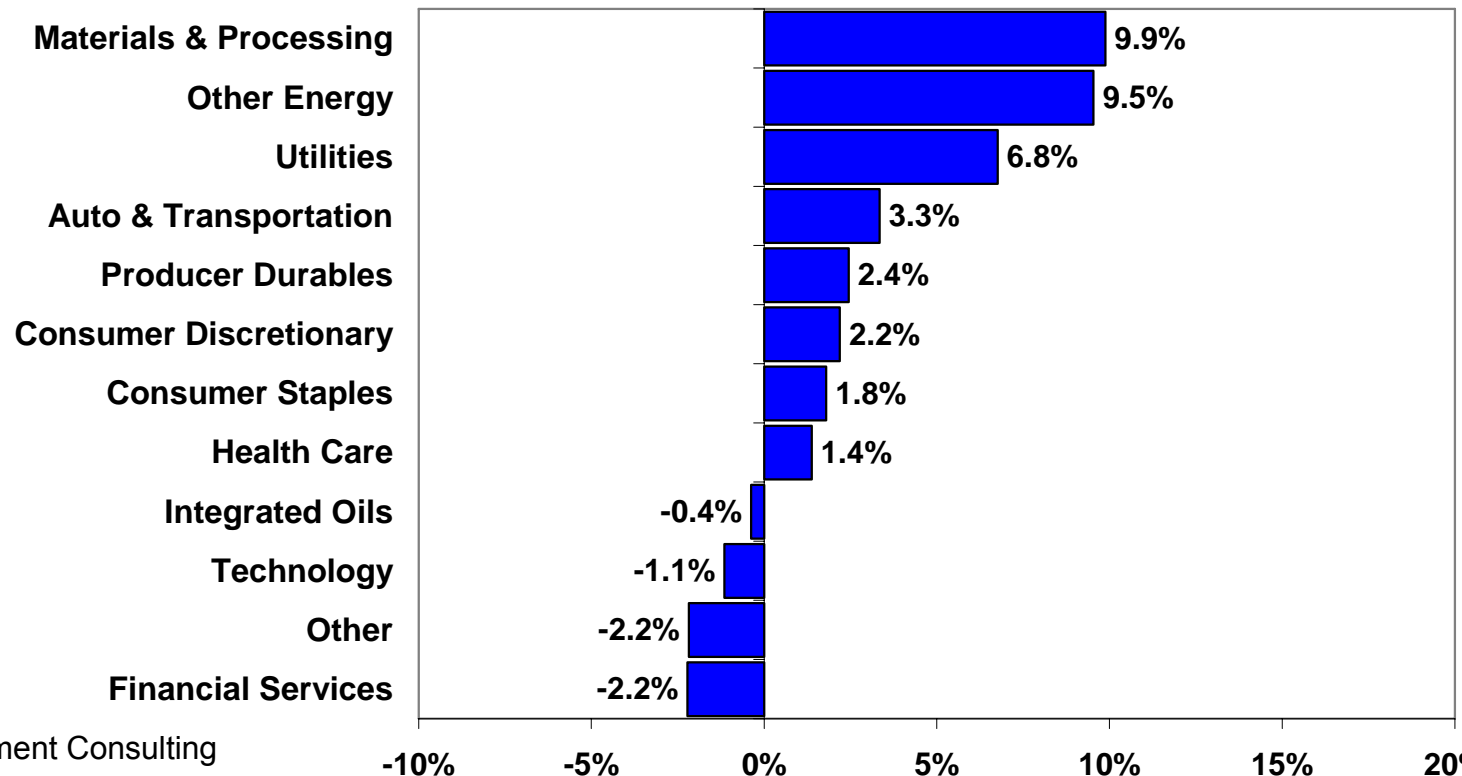
Large Cap Stocks Lagged

Best performance was in price-insensitive sectors

Capital Markets: US Large Cap Equity Market

- Global infrastructure growth benefited material & processing stocks
- Demand for predictable returns and TXU buyout (19.0% return) boosted utilities
- Subprime worries hampered returns in the financial sector

First Quarter Sector Performance - Russell 1000 Index



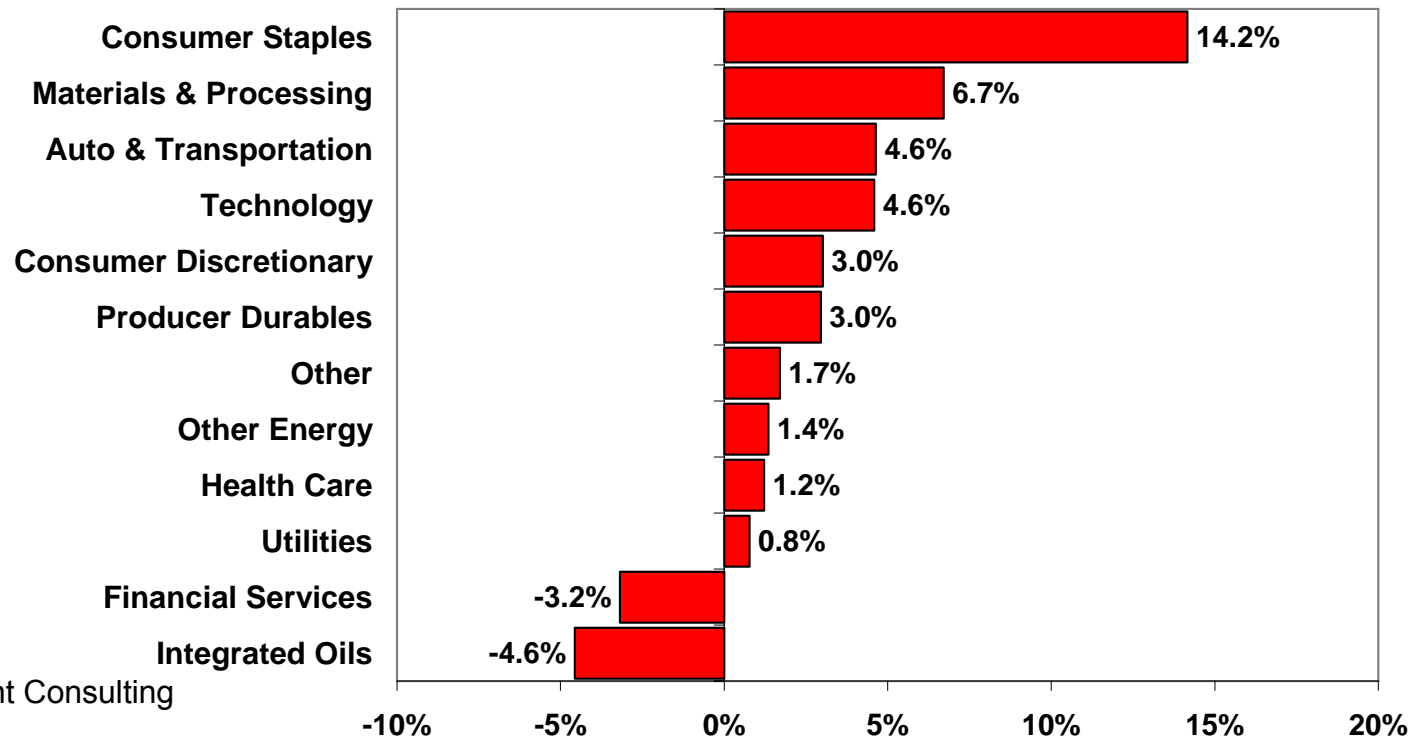
Small Cap Stocks Outperform Large Cap

Integrated oil stocks continued to underperform

Capital Markets: US Small Cap Equity Market

- Size mattered in small caps as the largest stocks in the Russell 2000 Index produced the best gains
- Investors favored companies with forecast growth rates between 10% and 20%
- As with large cap issues, banks in the finance sector detracted from results

First Quarter Sector Performance - Russell 2000 Index



Mid-cap Takes Market Leadership

- Mid-cap was very strong across all styles
- Large Growth lagged the other segments

1Q2007	Growth	Core	Value
Large	1.19	1.21	1.24
Mid	3.96	4.38	4.86
Small	2.48	1.95	1.46
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

One-Year Returns Are Far Above Expectations

- Core and value are significantly ahead of current long-term return expectations with the exception of small cap core
- Small cap growth stocks are the weakest

1-Year Returns	Growth	Core	Value
Large	7.06	11.84	16.83
Mid	6.90	11.79	17.13
Small	1.57	5.91	10.38
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Three-Year Results Are Strong

- Returns for all asset classes except large growth are well above long-term expectations
- Large growth has been weak since 2000 and the end of the dot-com era, but is showing signs of strength

3-Year Returns	Growth	Core	Value
Large	7.01	10.73	14.42
Mid	12.41	15.72	18.58
Small	9.41	12.00	14.47
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Cumulative 3-Year Results Are Generally Strong

- Returns for all but large growth are excellent; recovery continues to be strong
- Value returns were exceptional, especially mid-caps

Cumulative 3-Yr	Growth	Core	Value
Large	22.57	35.80	49.80
Mid	42.08	54.96	66.74
Small	30.93	40.46	49.92
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Five-Year Results Still Show Wide Variations

- Large growth is making a slow comeback
- Value, particularly small/mid value, is superior to other styles

5-Year Returns	Growth	Core	Value
Large	3.47	6.92	10.25
Mid	9.45	12.91	15.22
Small	7.88	10.95	13.61
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Cumulative 5-Year Results Vary Greatly, Depending on Market Segment

- Huge spread between growth and value

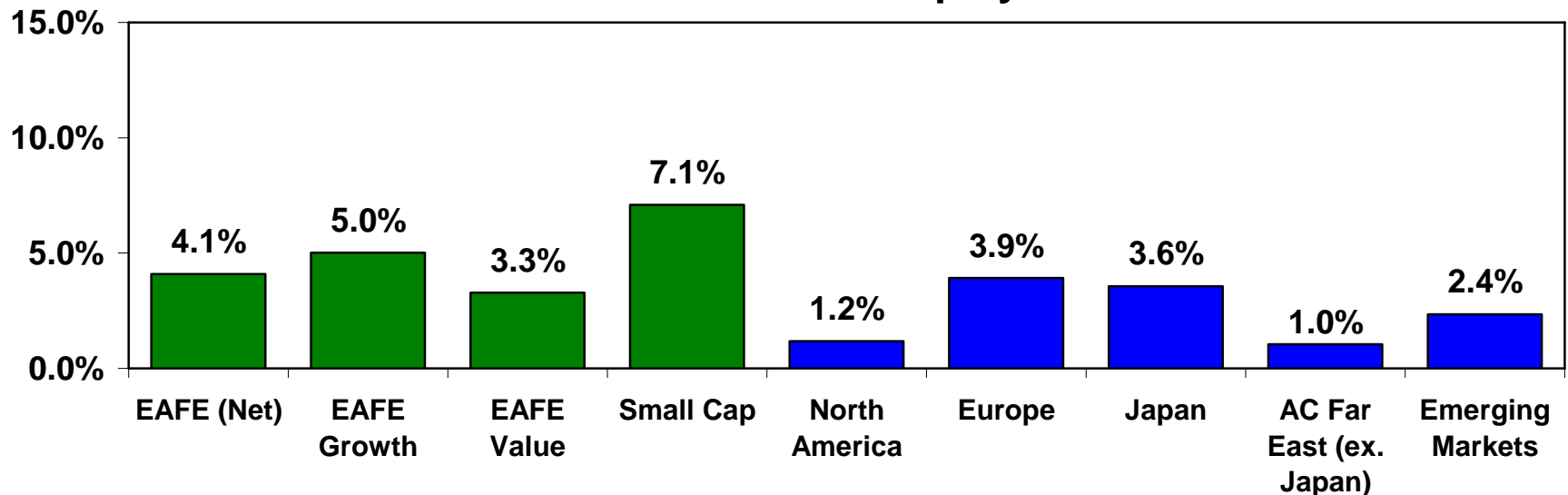
Cumulative 5-Yr	Growth	Core	Value
Large	18.71	39.80	62.82
Mid	57.14	83.51	103.07
Small	46.05	68.13	89.35
Note: Russell 1000, Mid-Cap, 2000 Indices: Value, Core, Growth			

Non-US Equities Outperformed US Stocks

Capital Markets: Non-US Equity Markets

- A resilient global economy supported gains in non-US stocks despite the 9% decline in Shanghai's main stock index
- Europe benefited from high consumer confidence, tame inflation and record low employment levels while Japan is experiencing one of its longest expansions
- US dollar underperformed most major currencies
- After some uncertainty at the end of February, emerging markets rebounded in March

First Quarter Non-US Equity Performance



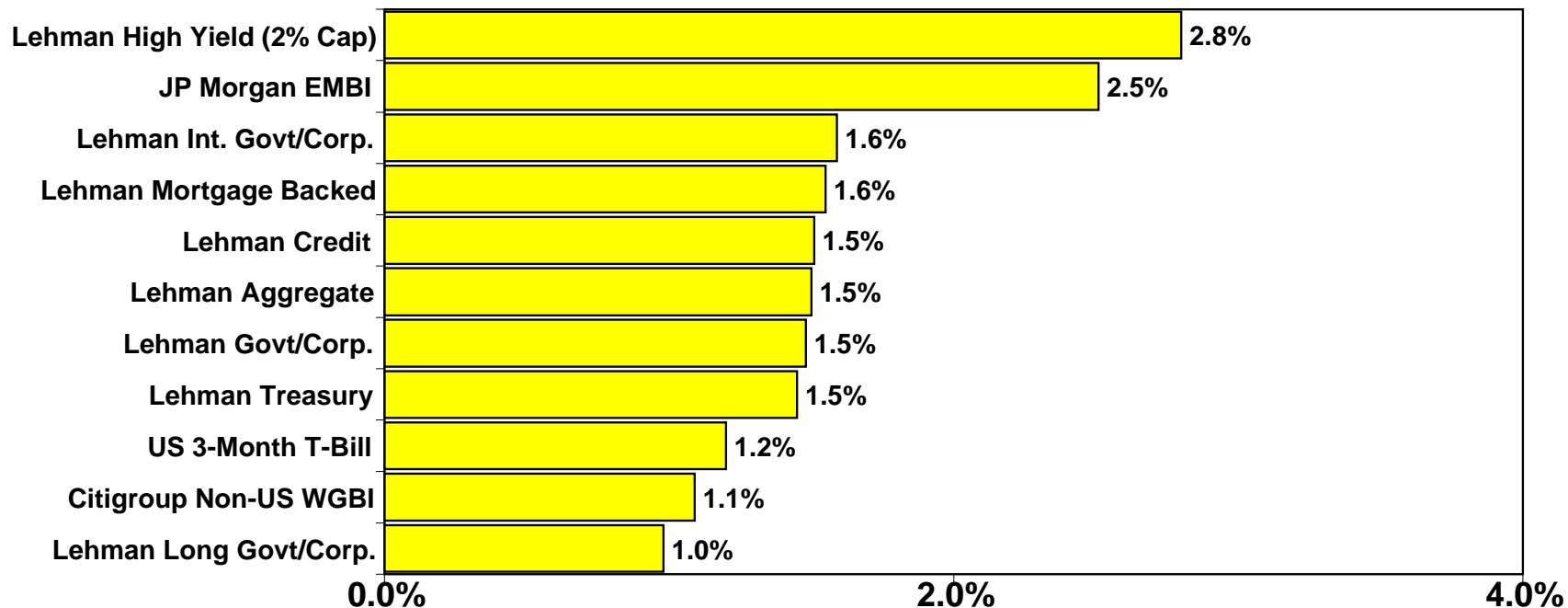
US Fixed Income Returns Were Modest

High yield bonds made the strongest contribution

Capital Markets: Fixed Income Market

- LB Aggregate Index was up 1.5% for the period
- Concerns over China and subprime loans pushed investment grade yields modestly wider, but high yield and emerging market spreads were tighter
- A steepening of the yield curve gave an advantage to shorter-term bonds

First Quarter Fixed Income Performance



Alternative Investments Show Amazing Strength Enthusiasm for M&As

Capital Markets: Alternatives – Private Equity

- Returns continued to be positive and steady
 - Venture returns have been very predictable over the last several quarters; one-year returns have moderated slightly
 - Short-term buyout returns are under increasing downward pressure, indicating that increased competition is causing diminished returns for investors
- Fund-raising and deal flow
 - Venture fund-raising for 1Q07 was at the lowest level for an opening quarter since 1Q04; however, IPO activity increased
 - Fund-raising combined with an abundance of low-cost financing has resulted in record-setting M&A and buyout activity at historically high prices

Fund Type	Periods Ending September 30, 2006			
	1 Year	3 Years	5 Years	10 Years
Early/Seed VC	2.9%	5.5%	-5.4%	38.3%
Balanced VC	10.7	12.8	1.8	16.8
Later Stage VC	27.8	10.5	2.7	9.4
All Venture	10.8%	9.4%	-1.0%	20.5%
Small Buyouts	11.3%	9.4%	5.0%	6.0%
Med Buyouts	37.2	12.3	6.1	10.9
Large Buyouts	23.1	16.4	8.3	8.3
Mega Buyouts	23.4	16.2	10.1	8.9
All Buyouts	23.6%	15.6%	9.2%	8.8%
Mezzanine	-8.1%	4.7%	2.9%	5.9%
All Private Equity	19.0%	13.2%	5.9%	11.2%
NASDAQ	5.5	7.8	8.7	7.1
S & P 500	9.7	9.9	5.2	7.5

Source: Thomson Financial/National Venture Capital Association. The Private Equity Performance Index is based on the latest quarterly statistics from Thomson Financial's Private Equity Performance Database analyzing the cashflows and returns for over 1860 US venture capital and private equity partnerships with a capitalization of \$678 billion. Sources are financial documents and schedules from Limited Partners investors and General Partners. All returns are calculated by Thomson Financial from the underlying financial cashflows. Returns are net to investors after management fees and carried interest. Buyout funds sizes are defined as the following: Small: 0-250 \$Mil, Medium: 250-500 \$Mil, Large: 500-1000 \$Mil, Mega: 1 Bil +.

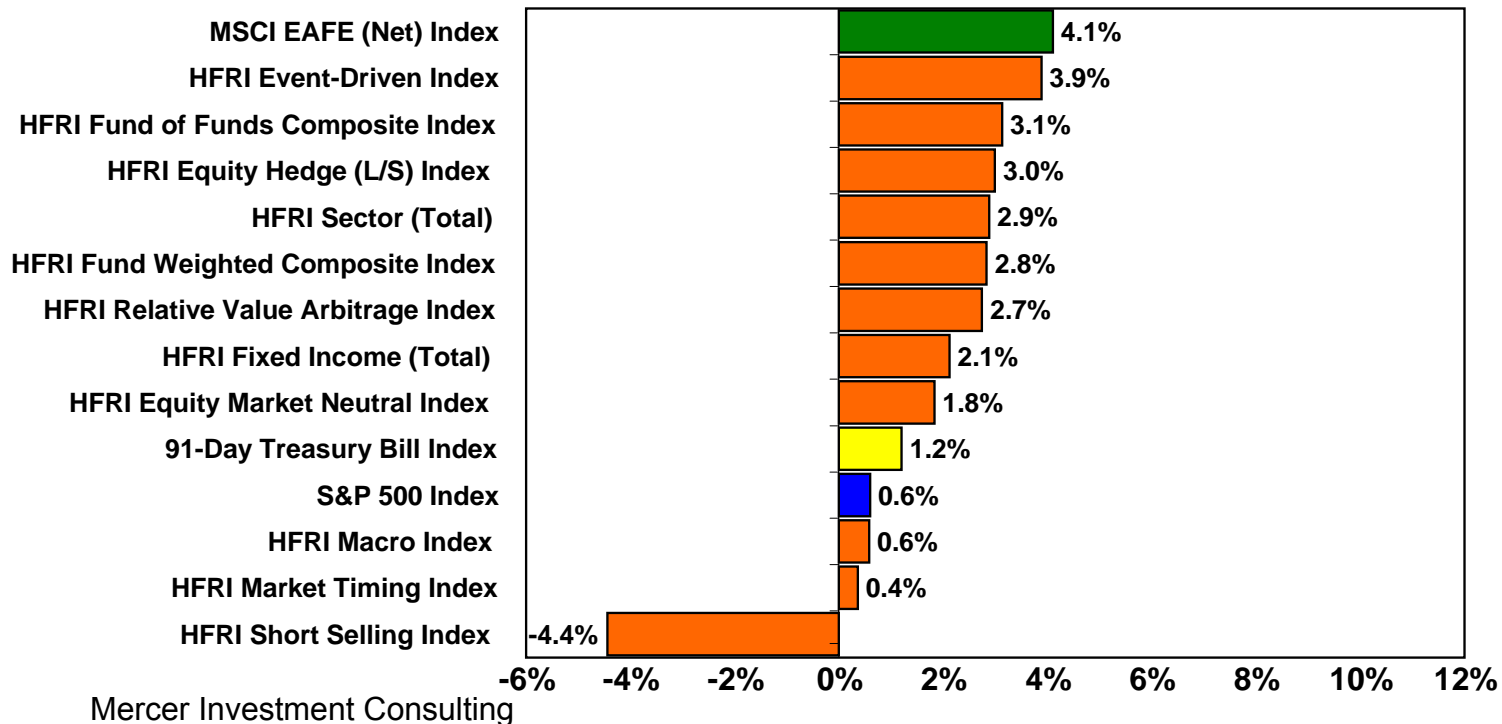
Hedge Funds Post Modest Gains

Big hedge funds got bigger

Capital Markets: Alternatives – Hedge Funds

- Hedge funds had records inflows of \$60Bn for 1Q07; industry assets ~\$1.6 trillion
- Performance rebounded against major indices as hedge funds were able to weather the downturn in the markets in late February and early March
- Managed futures and dedicated short sellers were laggards

First Quarter Hedge Fund Returns



Source: Hedge Fund Research, Inc. Includes over 6,000+ constituent funds. Includes both domestic and offshore funds. All funds report assets in USD. All funds report Net of All Fees returns on a monthly basis. Weighted Composite Index excludes fund of funds.

Real Estate Posted Solid Gains

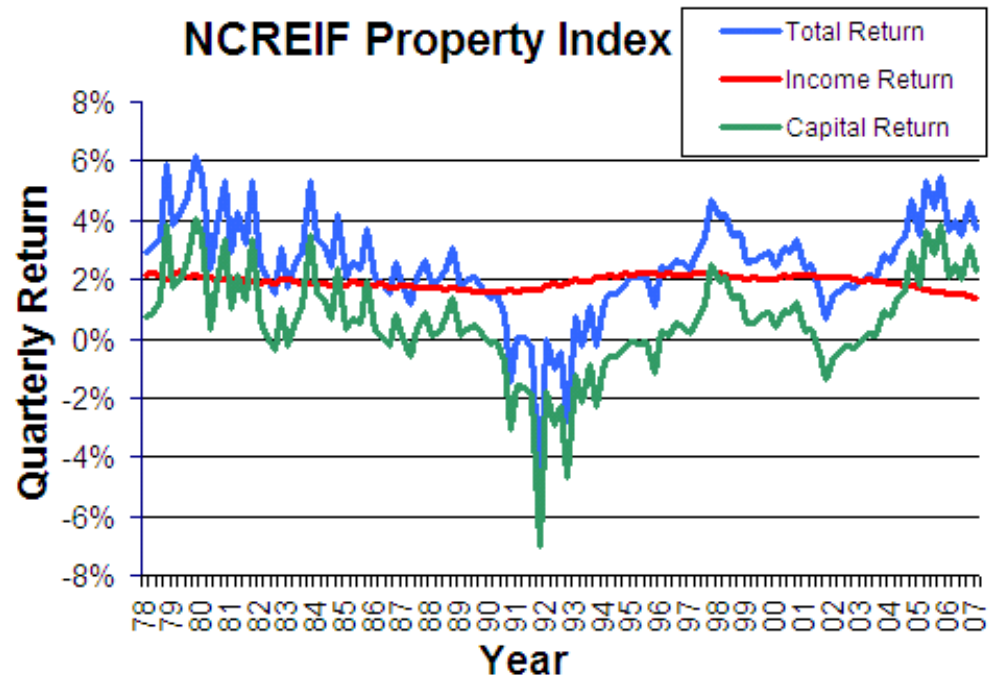
Capital Markets: Alternatives – Real Estate

■ Private Real Estate

- NCREIF Property Index was up 3.6% for the quarter:
 - 2.2% capital appreciation
 - 1.4% income
- Office sector (35.9% of index) was strongest sector, returning 4.6%

■ Public Real Estate

- REITs were up 3.5% for the period:
 - Retail, specifically regional malls, was the biggest gainer
 - Residential and self-storage produced negative returns
- Most investment managers remain bearish on REITs given valuations



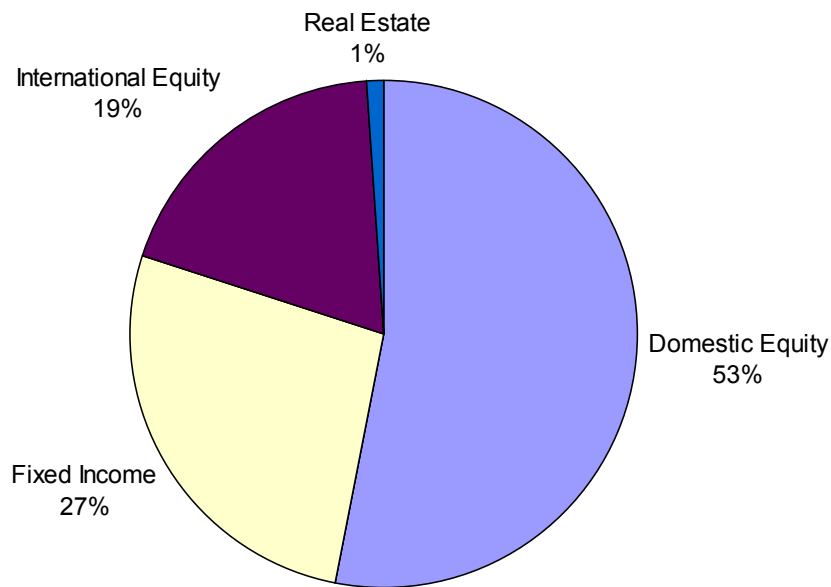


ASRS Total Fund Performance

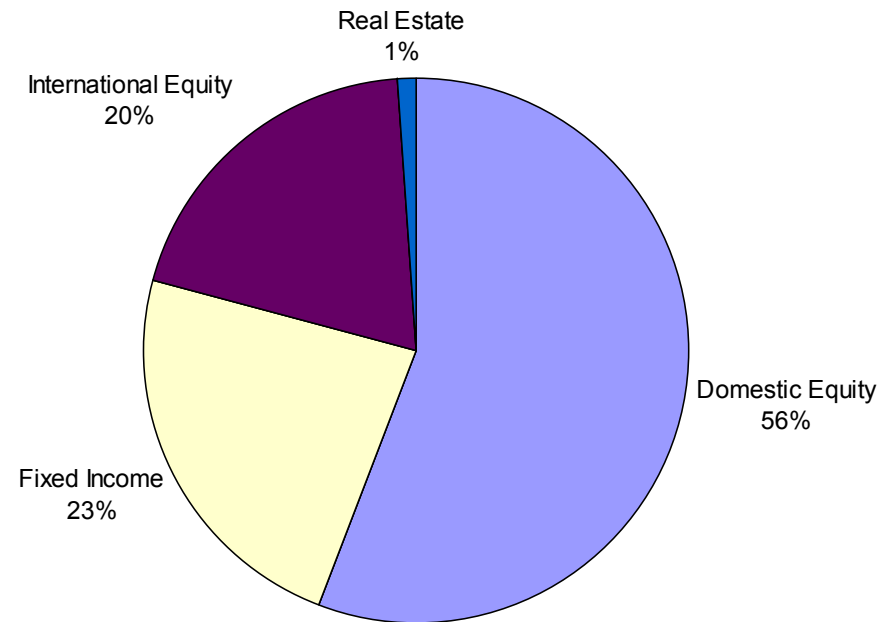
Total Fund Asset Allocation

March 31, 2007

**Policy Adjusted for Transition into
Real Estate and Private Equity**



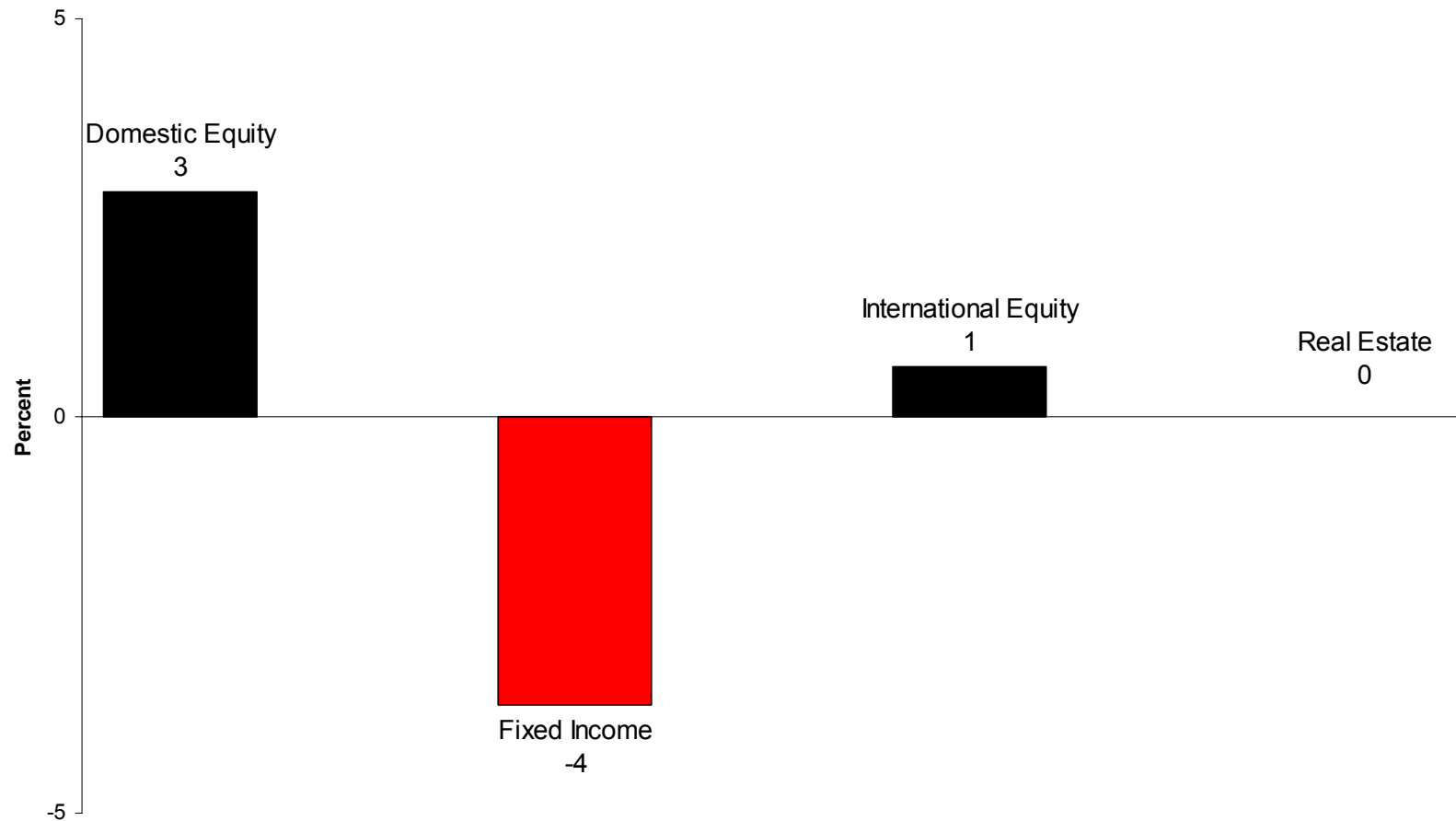
Actual Asset Allocation



Total Fund Asset Allocation

March 31, 2007

**Actual Asset Allocation vs. Policy Adjusted for
Transition into Real Estate and Private Equity**



Total Fund Performance For Periods Ending March 31, 2007

	<u>Quarter</u>	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>Inception</u>
1) Total Fund	2.2%	11.3%	10.3%	8.5%	9.2%	11.0%
Benchmark*	2.1	12.5	10.1	8.1	7.9	10.8
Excess Return	0.1	-1.2	0.2	0.4	1.3	0.2

* Interim Benchmark (current): 39% S&P 500, 7% S&P 400, 7% S&P 600, 27% LB Aggregate, 19% MSCI ACWI ex US, and 1% NPI+100 bps

Note: Interim Benchmark incorporates a proration of 5% real estate and 5% private equity to large cap equity

Policy History:

- 7/1/75-12/31/79 – 40% S&P 500/60% LB Aggregate
- 1/1/80-12/31/83 – 50% S&P 500/50% LB Aggregate
- 1/1/84-12/31/91 – 60% S&P 500/40% LB Aggregate
- 1/1/92-12/31/94 – 50% S&P 500/40% LB Aggregate/10% EAFE
- 1/1/95-6/30/97 – 45% S&P 500/40% LB Aggregate/15% EAFE
- 7/1/97-12/31/99 – 50% S&P 500/35% LB Aggregate/15% EAFE
- 1/1/00-9/30/03 – 53% S&P 500/30% LB Aggregate/17% EAFE
- 10/1/03-12/31/06 – 53% S&P 500/26% LB Aggregate/15% MSCI EAFE/ACWI ex US⁽¹⁾/6% NPI+100 bps
- 1/1/07-present – 31% S&P 500/7% S&P 400/7% S&P 600/26% LB Aggregate/18% MSCI ACWI ex US/6% NPI+100 bps/5% Russell 3000+300 bps

⁽¹⁾ MSCI EAFE/ACWI ex US Benchmark is the MSCI EAFE prior to 10/1/05 and the MSCI ACWI ex US thereafter

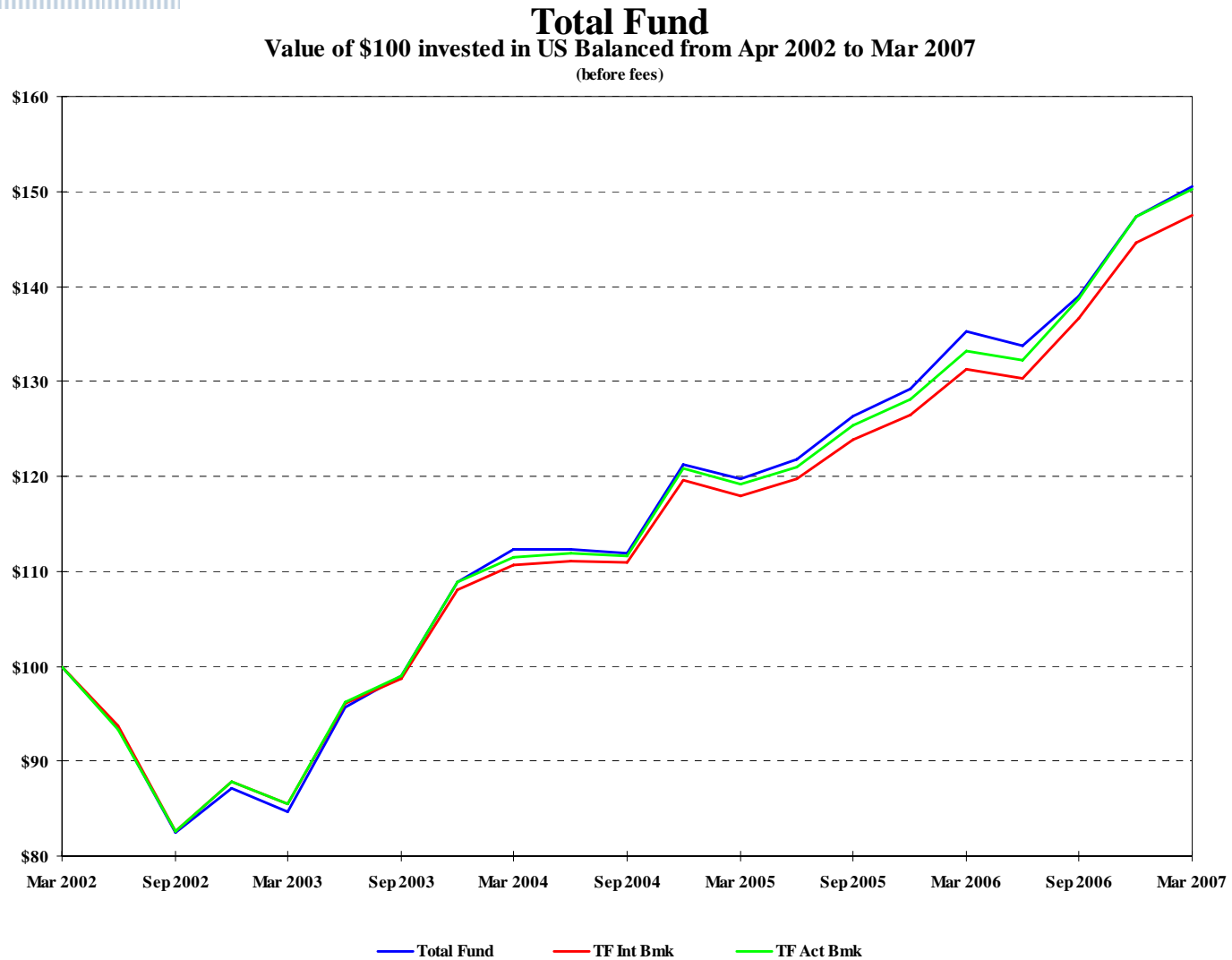
Total Fund Performance For Periods Ending March 31, 2007

	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>Inception</u>
ASRS Total Fund	11.3%	10.3%	8.5%	9.2%	11.0%
2) Actuarial Assumption	8.0%	8.0%	8.0%	8.0%	7.6%
Excess Return	3.3%	2.3%	0.5%	1.2%	3.4%
3) Asset Allocation Target	7.6%	7.4%	7.7%	8.2%	N/A
Excess Return	3.7%	2.9%	0.8%	1.0%	N/A
4) CPI Inflation + 3.75%	6.5%	6.8%	6.6%	6.3%	8.1%
Wage Inflation + 3.75%	4.6%	7.7%	7.8%	7.1%	8.2%
Excess Return - CPI	4.8%	3.5%	1.9%	2.9%	2.9%
Excess Return - Wage	6.7%	2.6%	0.7%	2.1%	2.8%

Supplemental Comparison Information For Periods Ending March 31, 2007

	1 Year	3 Years	5 Years	10 Years	15 Years
Russell/Mellon Trust Universes					
Master Trust Funds - Total Funds	42	57	67	48	47
Total Funds - Public	67	80	88	61	32
Total Funds Billion Dollar - Public	72	85	90	69	35
Total Funds - Corporate	34	52	59	42	50
Wilshire Trust Universe Comparison Service					
Master Trusts - All	28	41	46	48	41
Public Funds	33	42	53	42	17
Public Funds Greater than \$1.0 Billion	60	71	79	51	28
Corporate	26	43	45	60	53
Callan Associates Inc.					
Total Funds	34	55	63	44	37
Public Funds	39	61	72	39	20
Public Funds - Large (>1B)	52	84	90	45	23
Corporate Funds	30	53	62	44	44

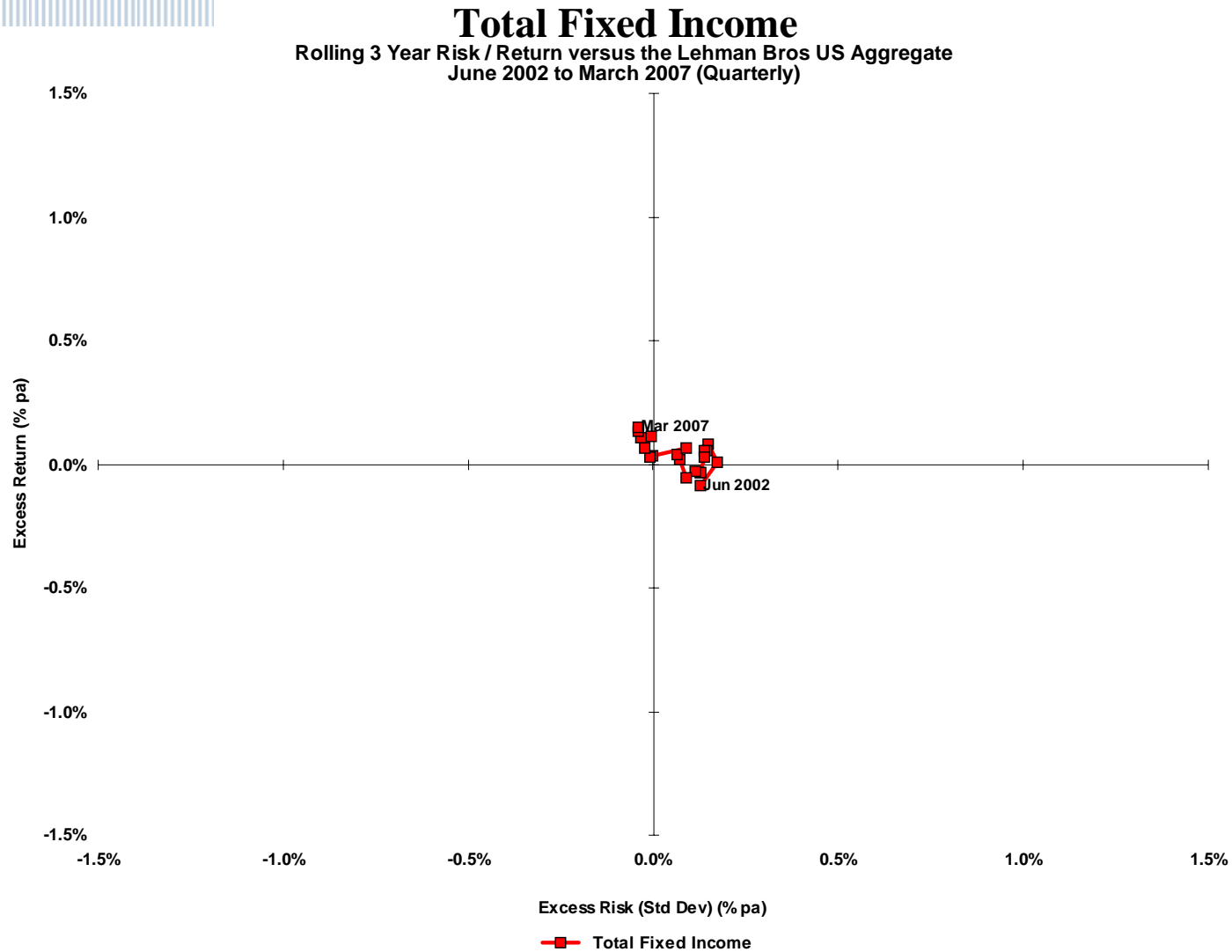
Total Fund Growth



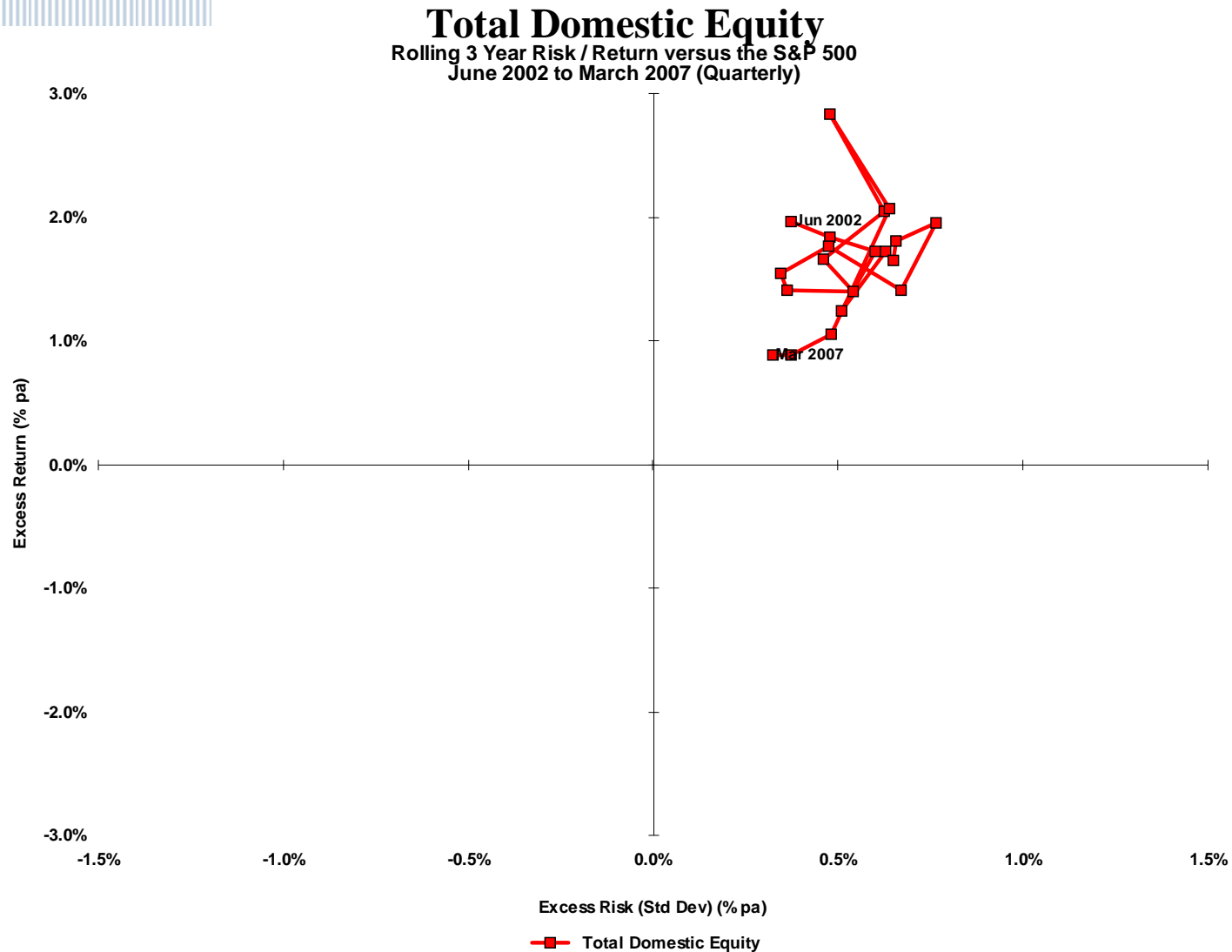
Risk/Return Analysis



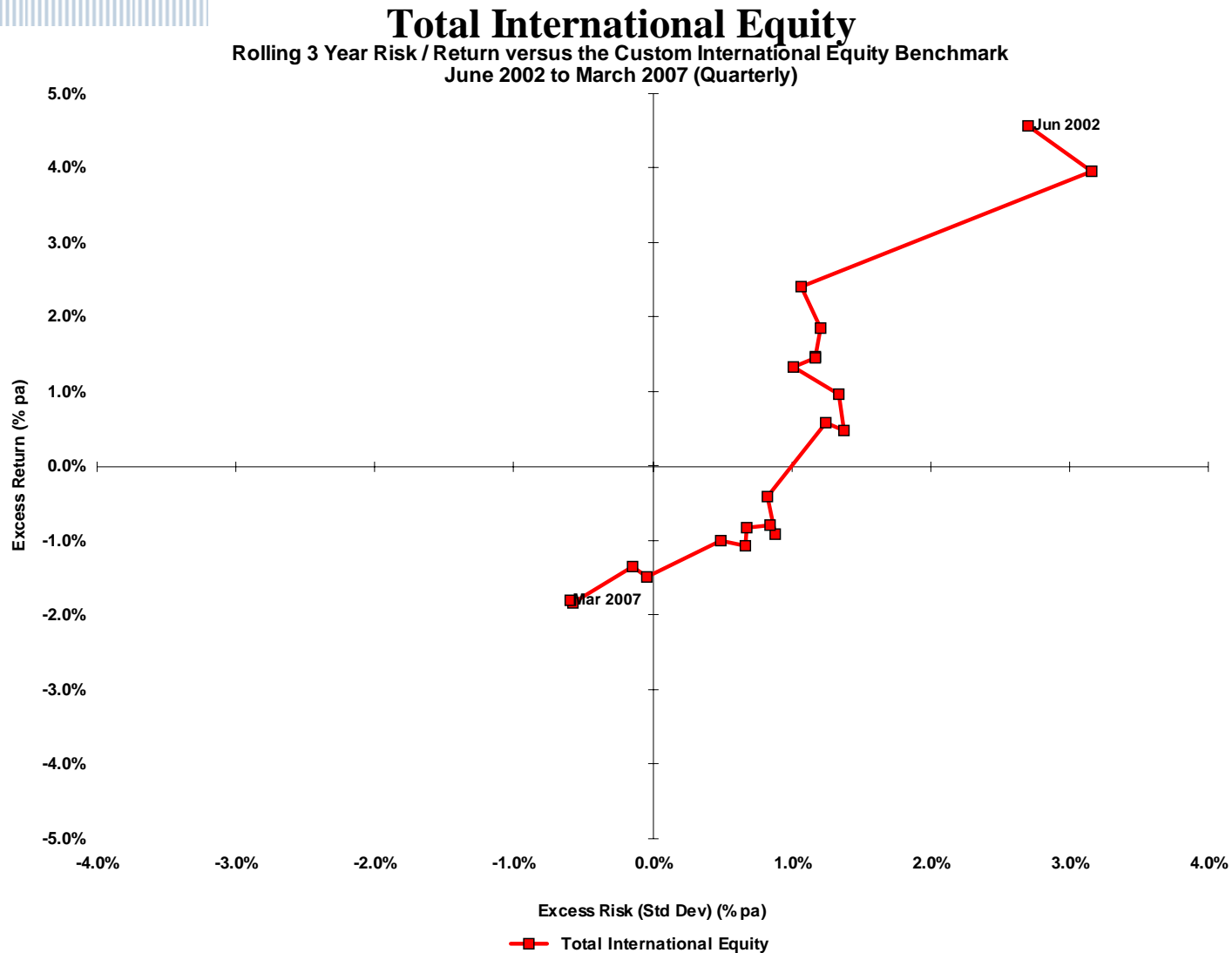
Risk/Return Analysis



Risk/Return Analysis



Risk/Return Analysis



Performance vs. Benchmarks

For the 3 Years Ending March 31, 2007

	<u>Return</u>	<u>Assumed ROR</u>	<u>Std. Dev.</u>
Total Fund	10.3%	7.4%	5.9%
Benchmark*	10.1		5.6
Domestic Fixed	3.5	4.5	3.7
LB Aggregate	3.3		3.7
Domestic Equity	10.9	8.5	7.4
S&P 500	10.1		7.1
Intl. Equity	18.6	8.5	10.4
Custom Bmk	20.4		11.0
Real Estate	N/A	--	N/A

* Interim Benchmark (current): 39% S&P 500, 7% S&P 400, 7% S&P 600, 27% LB Aggregate, 19% MSCI ACWI ex US, and 1% NPI+100 bps

Note: Interim Benchmark incorporates a proration of 5% real estate and 5% private equity to large cap equity

Performance vs. Benchmarks

For the 5 Years Ending March 31, 2007

	<u>Return</u>	<u>Assumed ROR</u>	<u>Std. Dev.</u>
Total Fund	8.5%	7.7%	11.1%
Benchmark*	8.1		10.8
Domestic Fixed	5.4	4.9	3.6
LB Aggregate	5.4		3.6
Domestic Equity	7.5	8.8	15.5
S&P 500	6.3		15.2
Intl. Equity	15.2	9.0	18.4
Custom Bmk	16.3		17.9
Real Estate	N/A	--	N/A

* Interim Benchmark (current): 39% S&P 500, 7% S&P 400, 7% S&P 600, 27% LB Aggregate, 19% MSCI ACWI ex US, and 1% NPI+100 bps

Note: Interim Benchmark incorporates a proration of 5% real estate and 5% private equity to large cap equity

Large Cap